OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/602,740

DATE: 07/05/2001 TIME: 11:39:12

Input Set : D:\seqlistcorr.txt

Output Set: N:\CRF3\07052001\1602740.raw

3 <110> APPLICANT: Pompejus, Markus 4 Kroger, Burkhard 5 Schroder, Hartwig Zelder, Oskar Haberhauer, Gregor <120> TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING PROTEINS 10 INVOLVED IN CARBON METABOLISM AND ENERGY 11 PRODUCTION 13 <130> FILE REFERENCE: BGI-126CP 15 <140> CURRENT APPLICATION NUMBER: US 09/602,740 C--> 16 <141> CURRENT FILING DATE: 2001-06-20 18 <150> PRIOR APPLICATION NUMBER: 60/141,031 19 <151> PRIOR FILING DATE: 1999-06-25 21 <150> PRIOR APPLICATION NUMBER: 60/143,208 22 <151> PRIOR FILING DATE: 1999-07-09 24 <150> PRIOR APPLICATION NUMBER: 60/151,572 25 <151> PRIOR FILING DATE: 1999-08-31 27 <150> PRIOR APPLICATION NUMBER: DE 19931412.8 28 <151> PRIOR FILING DATE: 1999-07-08 30 <150> PRIOR APPLICATION NUMBER: DE 19931413.6 31 <151> PRIOR FILING DATE: 1999-07-08 33 <150> PRIOR APPLICATION NUMBER: DE 19931419.5 34 <151> PRIOR FILING DATE: 1999-07-08 36 <150> PRIOR APPLICATION NUMBER: DE 19931420.9 37 <151> PRIOR FILING DATE: 1999-07-08 39 <150> PRIOR APPLICATION NUMBER: DE 19931424.1 40 <151> PRIOR FILING DATE: 1999-07-08 42 <150> PRIOR APPLICATION NUMBER: DE 19931428.4 43 <151> PRIOR FILING DATE: 1999-07-08 45 <150> PRIOR APPLICATION NUMBER: DE 19931431.4 46 <151> PRIOR FILING DATE: 1999-07-08 48 <150> PRIOR APPLICATION NUMBER: DE 19931433.0 49 <151> PRIOR FILING DATE: 1999-07-08 51 <150> PRIOR APPLICATION NUMBER: DE 19931434.9 52 <151> PRIOR FILING DATE: 1999-07-08 54 <150> PRIOR APPLICATION NUMBER: DE 19931510.8 55 <151> PRIOR FILING DATE: 1999-07-08 57 <150> PRIOR APPLICATION NUMBER: DE 19931562.0 58 <151> PRIOR FILING DATE: 1999-07-08 60 <150> PRIOR APPLICATION NUMBER: DE 19931634.1 61 <151> PRIOR FILING DATE: 1999-07-08 63 <150> PRIOR APPLICATION NUMBER: DE 19932180.9 64 <151> PRIOR FILING DATE: 1999-07-09 66 <150> PRIOR APPLICATION NUMBER: DE 19932227.9 67 <151> PRIOR FILING DATE: 1999-07-09

69 <150> PRIOR APPLICATION NUMBER: DE 19932230.9

70 <151> PRIOR FILING DATE: 1999-07-09



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- 124 Met Val Asp Val Val
- 125 1 5
- 127 cgc gca cgc gat act gaa gat ttg gtt gca cag gct gcc tcc aaa ttc 163
- 128 Arg Ala Arg Asp Thr Glu Asp Leu Val Ala Gln Ala Ala Ser Lys Phe
- .29 10 15 20
- 131 att qaq qtt qtt qaa qca qca act qcc aat aat ggc acc gca cag gta 211
- 132 Ile Glu Val Val Glu Ala Ala Thr Ala Asn Asn Gly Thr Ala Gln Val
- .33 25 . 30 35
- 135 gtg ctc acc ggt ggt ggc gcc ggc atc aag ttg ctg gaa aag ctc agc
- 136 Val Leu Thr Gly Gly Gly Ala Gly Ile Lys Leu Leu Glu Lys Leu Ser
- 137 40 45 50
- 139 gtt gat gcg gct gac ctt gcc tgg gat cgc att cat gtg ttc ttc ggc 307
- 140 Val Asp Ala Ala Asp Leu Ala Trp Asp Arg Ile His Val Phe Phe Gly

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						Pro												
145	7.0	024	9		,	75	,	00			80		,		υ - 1.	85		
		cat	σασ	qca	cta	ttg	tcc	aaq	att	tct		cct	qaa	qcc	aac	-		403
						Leu												
149		-			90			4		95	1.7				100			
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153		-	•	105		•	*		110					115	0			
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157	-		120			-		125				-	130				. '	
159	ctg	ctc	ggc	atg	ggt	ggc	gaa	ggc	cat	atc	aac	tcc	ctg	ttc	cct	cac		547
						Gly											;	4. 1.
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167	tcc	cct	aag	cct	cct	tca	gag	cgt	gca	act	cta	acc	ctt	cct	gcg	gtt		643 .
168	Ser	Pro	Lys	Pro	Pro	Ser	Glu	Arg	Ala	Thr	Leu	Thr	Leu	Pro	Ala	Val		
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172	His	Ser	Ala	Lys	Arg	Val	Trp	Leu	Leu	Val	Ser	Gly	Ala	Glu	Lys	Ala		
173				185					190					195				
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198				20			_		25	~ 3	2			30	_	_		
	GLY	Thr		GIn	Val	Val	Leu		Gly	GLY	GLY	Ala		IIe	Lys	Leu		
201	_	a 1	35	_	~		_	40		_	_		45	_	_	1		
	Leu		ьуs	Leu	ser	Val		Ата	Ala	Asp	Leu		Trp	Asp	Arg	тте		
204	** !	50	n.l.	D1.	a 1		55	_		**- 7	_	60	a .		a -	a 1		
		va⊥	ьиe	ьие	GТĀ	Asp	GIU	arg	Asn	val		val	ser	Asp	ser			
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212	Pro	GIu	Ala	100	ше	HIS	GIY	туr	105	rea	GIY	Asp	vaı	110	Leu	Ala	
	Glu	Δla	Ala		Ala	Tvr	Glu	Ala		Leu	Asp	Glu	Phe		Pro	Asn	
216	Oru	mu	115	**** 9	7114	-1-	014	120		Lou	1106	0	125				
	Gly	Phe		Leu	His	Leu	Leu	Gly	Met	Gly	Gly	Glu	Gly	His	Ile	Asn	
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	145	_		_		150					155					160	
	Ile	Ala	Val	Phe	-	Ser	Pro	Lys	Pro		Ser	GLu	Arg	Ala		Leu	
225	Thr	T 011	Dro	λla	165	шіс	Cor	λla	Tvc	170	พรา	Фrn	Lou	Lau	175	Sár	1
228	1111	Leu	PIO	180	Val	птэ	ser	ніа	185	AIG	Val	тър	цец	190	Vai	261	
	Glv	Ala	Glu		Ala	Glu	Ala	Ala		Ala	Ile	Val	As'n		Glu	Pro	
231	- 1	-	195	-				200					205	, -			
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234		210					215					220					
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246 247 248 250 251 253 254 255 257 258 259 261	<223 <223 <400 gcaa acat atc Ile	2> L0 3> OT 3> OT 1 1 2 2 3 3 3 3 4 3 4 3 5 4 4 5 5 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	CCAT: FHER EQUEN CGA a CGC CGC Arg	ION: INFO NCE: atgos acc Thr	(103) CRMAT 3 Staat Gaa Glu 10 cag	rion: tt aa tt to att Ile gag	gaa Glu	A0162 cacti cgtag atc Ile	cct Pro	gga Gly 15 tct	cac His	atg Met 1 cca Pro	tcg Ser acc Thr	aaa Lys gcc Ala	acg Thr atc Ile 20 ggc	atc Ile 5 cat His	115
246 247 248 250 251 253 254 255 257 258 259 261 262	<222 <222 <400 gcaa acat atc Ile	2> L0 3> OT 3> OT 1 1 2 2 3 3 3 3 4 3 4 3 4 4 4 4 4 4 4 4 4 4	CCAT: FHER EQUEN CGA a CGC CGC Arg	ION: INFO NCE: atgos acc Thr atg	(103) CRMAT 3 Staat Gaa Glu 10 cag	rion: tt aa tt to att Ile gag	gaa Glu	A0162 cactt cgtag atc Ile	cct Pro cca Pro	gga Gly 15 tct	cac His	atg Met 1 cca Pro	tcg Ser acc Thr	aaa Lys gcc Ala ggc Gly	acg Thr atc Ile 20 ggc	atc Ile 5 cat His	115 163
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293	<400>	> SE	QUE	NCE:	4												
294	Met S	er	Lys	Thr	Ile	Ile	Val	Arg	Thr	Glu	Ile	Glu	Ile	Pro	Gly	His	•
295	1		-		5	•				10					15	· · · · · ·	
297	Pro I	hr	Ala	Ile	His	Ile	Ala	Glu	Met	Gln	Glu	Leu	Pro	Pro	Ser	Glu	
298				20					25					30			
	Ala G	ln	Glv	Glv	Val	Gln	Met	Cvs	Lvs	Met.	Gln	Arq	Île	Ile	Glu	Ĺeu	
301			35	1				40				5	45				
	Ala G	:1 v		Δla	Glu	Glv	Asn		Va 1	Thr	Glv	Δla		Va1	Tle	Glv	
304	nia o	50	1111	niu	Olu	017	55	, 44	, u i		0+1	60	011	, 41			
	Gly S		Δen	Dho	Gln	T.011		Δcn	Glu	Dro	Δcn		Va 1	Va 1	Pro	His	
307	65	,cr	N3II	riic	GIII	70	USII	доп	Olu	110	75	Olu	vai	VUI	110	80	
	Pro A		mh×	Marx	717		Dho	Dro	7 cn	т10		λla	นาโ	Wa 1	т1 о		
	PIO A	rsb	TIII	тут	85	АБР	rne	FIO	Kap	90	цуэ	Ата	Val	Val	95	261	
310	7 l n C		mb	Dha		C1**	T 011	M 252	T 011	-	7 1 a	C1	ת 1 ת	T 110		Dro	
	Ala G	ıLu	THE		GIU	СТА	ьец	тър		GIU	Ата	СТУ	Ата		Pile	PIO	
313	a 1 r			100					105					110			
	Gly I	eu								•							
316	1010	۵-	115		_												
	<210>																
	<211>				30												
	<212>					_											
	<213>				Cory	neba	ictei	rium	glut	amio	cum						
	<220>				•												
	<221>																
326	<222>	· LO	CATI	ON:	(10)	L) (757)		•							
327	<223>	· OT	HER	INFO	ORMAT	ION:	RX <i>I</i>	40224	15								
	<400>																
330	gccac	acc	gc c	cacgo	gcaco	eg at	gcga	atgtt	: tgt	ggca	igtg	ctg	cgaaa	aga a	agtag	gacctg	60
332	tgago	taa	gt g	gggt	cagac	a ag	gaggg	jctat	: gat	ttag	ggc	atg	gca	caa.	cgt	act	115
333												Met	Ala	Gl'n	Arg	Thr	
334												1				5	
336	cca c	ta	atc	qcc	cca	tcc	att	ctt	gct	gct	gat	ttc	tcc	cgc	tta	ggg	163
	Pro L																
338					10					15	•			-	20	-	
	gag c	aσ	ata	tta		att	cct	gat	qct		taa	att	cac	qtc		atc	211
	Glu G																
342				25					-30	F	F			35	F		
	atg g	ac	σσα		ttc	att	cca	aac		aσc	ttt	aac	aca.		atc	aca	259
	Met A																
346	11		40	11.15			0	45				1	50	F			
J-10						~ '	•	1.5					30				

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/602,740

DATE: 07/05/2001

TIME: 11:39:13

Input Set : D:\seqlistcorr.txt

Output Set: N:\CRF3\07052001\1602740.raw

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:9604 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 L:57063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:655 L:57064 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:655 L:57098 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:656